

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 2020-13-A - ORDER NO. 2021-412

JUNE 9, 2021

IN RE: Application of Chem-Nuclear Systems, LLC,	)	ORDER APPROVING
a Subsidiary of EnergySolutions Company, for	)	AND IDENTIFYING
Adjustment in the Levels of Allowable	)	ALLOWABLE COSTS
Costs and for Identification of Allowable	)	
Costs (Fiscal Year 2020-2021)	)	

**I. INTRODUCTION**

This matter comes before the Public Service Commission of South Carolina (“PSC” or the “Commission”) by way of the Application of Chem-Nuclear Systems, LLC, a subsidiary of *EnergySolutions* company (“Chem-Nuclear” or the “Company”), dated September 25, 2020 (the “Original Application”). By its Original Application, Chem-Nuclear sought an adjustment in the levels of certain allowable costs for Fiscal Year 2019-2020, which the Commission had previously identified, and for the identification of allowable costs for Fiscal Year 2020-2021, all of which are associated with the operation of the Company’s regional low-level radioactive waste disposal facility located in the vicinity of Barnwell, South Carolina (the “Barnwell Facility”).

The Original Application was submitted pursuant to the pertinent provisions of the Atlantic Interstate Low-level Radioactive Waste Compact Implementation Act (the “Act”), which is codified as S.C. Code Ann. § 48-46-10, *et. seq.* (2008 & Supp. 2020). On March 2, 2021, the Company filed and served an Amended Application and Exhibits, which proposed certain revisions to the information contained in the Original Application to reflect

the Company's reconciliation of certain issues with the South Carolina Office of Regulatory Staff ("ORS"). Also, on March 2, 2021, the Company filed and served the Direct Testimony of Benjamin S. Smith, reflecting the position of the Company as contained in the Amended Application and Exhibits.

The Act established a comprehensive economic regulatory program and governs the relationship between the State of South Carolina and operators of facilities for the disposal of low-level radioactive waste. Among other things, the Act provides for South Carolina's membership in the Atlantic Interstate Low-Level Radioactive Waste Management Compact Commission (the "Compact Commission") and authorizes the manner in which South Carolina participates in the Compact Commission with the other two member states, Connecticut and New Jersey. S.C. Code Ann. § 48-46-20 (2008).

The Act fixed a schedule of annually declining maximum volumes of low-level radioactive waste that a disposal facility in South Carolina may accept from generators within and without the Compact Commission's member states. S.C. Code Ann. § 48-46-40(A)(6)(a) (Supp. 2020). Starting on July 1, 2008, the Barnwell Facility was limited to accepting waste exclusively from generators in South Carolina, New Jersey, and Connecticut, the three Compact Commission states.

In addition, the Act fixes responsibility for the approval of disposal rates for low-level radioactive waste and provides for the disposition of revenues produced by the operation of disposal facilities subject to the Act. The Barnwell Facility is the only disposal facility for low-level radioactive waste in South Carolina.

Under the Act, the Commission has the responsibility to identify the "allowable costs" of a disposal facility operator. S.C. Code Ann. § 48-46-40(B)(1) (Supp. 2020).

“Allowable costs” are “costs to a disposal site operator of operating a regional disposal facility,” and they “are limited to costs determined by standard accounting practices and regulatory findings to be associated with facility operations.” S.C. Code Ann. § 48-46-30(1) (2008). The Act provides that “allowable costs” expressly include the costs of certain specifically identified activities necessary in the operation of a low-level radioactive waste facility, in addition to any other costs directly associated with disposal operations determined by the Commission as allowable. S.C. Code Ann. § 48-46-40(B)(3)(a) through (n) (Supp. 2020). The Act excludes from identification as “allowable costs” the costs of certain expressly listed activities “and other costs determined by the PSC to be unallowable.” S.C. Code Ann. § 48-46-40(B)(3) (Supp. 2020).

The Act entitles a disposal facility operator to recover an operating margin of twenty-nine percent (29%). This operating margin is authorized for the total amount of all identified “allowable costs,” excluding allowable costs for taxes, licensing, and permitting fees, which the operator is required to remit to governmental entities. S.C. Code Ann. § 48-46-40(B)(5) (Supp. 2020).

The level of “allowable costs” and the statutory operating margin affect the amount of annual revenue that a disposal facility operator remits to the State of South Carolina. At the end of the fiscal year, the operator pays the South Carolina Department of Revenue an amount equal to the total revenue that the operator had received for waste disposal services during the fiscal year, reduced by the operator’s identified “allowable costs,” and reduced further by the twenty-nine percent (29%) statutory operating margin on the “allowable costs” under the Act, and reduced further by payments that the operator made during the fiscal year for reimbursement of administrative costs incurred for the conduct of certain

state agencies' functions in administering the Act. S.C. Code Ann. § 48-46-60(B) and (C) (Supp. 2020).

The Act provides that the operator of a low-level radioactive waste disposal site may apply to the Commission for adjustments in the levels of "allowable costs," which the Commission had identified for the previous fiscal year and for identification of costs which the Commission had not previously identified as "allowable costs." S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2020). Upon disposition of the issues in an application, the Act requires the Commission to authorize the site operator to adjust its "allowable costs" for the current fiscal year to compensate the site operator for revenues "lost" during the previous fiscal year (that is, the difference between the level of "allowable costs" previously identified and the level of "allowable costs" identified upon approval of the application). *Id.*

Chem-Nuclear filed its Original and Amended Applications in this proceeding seeking to adjust the level of certain "allowable costs" which the Commission identified in Order No. 2020-441 and the amount of such costs that the Company actually experienced in the Fiscal Year 2019-2020. The Original Application and Amended Application also sought identification of the Company's "allowable costs" for Fiscal Year 2020-2021.

Chem-Nuclear's Original and Amended Applications sought an adjustment for additional compensation for the "vault cost" variable cost rates that were established by Order No. 2020-441 and applied during Fiscal Year 2019-2020. The actual incurred total cost for routine disposal vaults was \$33,630.43 more than the costs allowed by the rates set previously. Amended Application for Fiscal Year 2020-2021, ¶12 and Amended Exhibit A to the Amended Application.

Additionally, Chem-Nuclear's Original and Amended Applications sought an adjustment for additional compensation for the Company for the "variable labor and non-labor costs" incurred in Fiscal Year 2019-2020 as the actual costs specified in the Original and Amended Applications as variable labor and non-labor costs were \$53.02 more than those identified and approved in Order No. 2020-441. Amended Application for Fiscal Year 2020-2021, ¶11 and Amended Exhibit A to the Amended Application.

Upon receipt of the Company's Original Application, the Commission Clerk's Office directed Chem-Nuclear to publish a Notice of Filing and Hearing and Pre-file Testimony Deadlines, advising the public of the submission of the Original Application and of the manner in which interested persons might intervene or otherwise participate in this proceeding. Chem-Nuclear published the Notice in a newspaper of general circulation on October 23, 2020, and furnished Proof of Publication to the Commission on November 9, 2020.

The Act specifies certain agencies to be parties of record in proceedings for identification of "allowable costs" before the Commission. Those parties are the Executive Director of the ORS and the Attorney General for the State of South Carolina. S.C. Code Ann. § 48-46-40(B)(9) (Supp. 2020). In addition, the Compact Commission and the South Carolina Department of Health and Environmental Control ("DHEC") have the discretion under the Act to participate as parties. Id. Pursuant to the provisions of S.C. Code Ann. § 48-46-40(B)(9), ORS participates as a party to these proceedings in order to represent "the interests of the State of South Carolina."

On April 22, 2021, the Commission held a virtual evidentiary hearing with respect to the Company's Amended Application. The Honorable Justin T. Williams, Chairman,

presided. F. David Butler, Esquire, served as Advisor to the Commission. Appearances were as follows: J. David Black, Esquire, represented Chem-Nuclear and Christopher M. Huber, Esquire, and Andrew M. Bateman, Esquire, represented ORS. No party petitioned to intervene in this docket. The South Carolina Attorney General's Office did not appear or participate in the hearing.

During the virtual evidentiary hearing, ORS's Examination Report, with the attached Exhibit 1 and Exhibit 2, and the cover letter filing the Examination Report were entered into the record as Hearing Exhibit 1. Daniel F. Sullivan, who is the Audit Department Director at ORS, prepared the Examination Report, with Exhibits 1 and 2, and testified at the hearing. Chem-Nuclear presented the testimony of one witness, Benjamin S. Smith, Chem-Nuclear's Director for Barnwell Disposal Operations. The pre-filed Direct Testimony of Mr. Smith was entered into the record as if given orally from the stand and Chem-Nuclear's Amended Application, with attached Amended Exhibit A, Amended Exhibit B, and Amended Exhibit C, were entered into the record as Hearing Exhibit No. 2.

## **II. DISCUSSION OF ISSUES**

All of the issues relating to the identification of "allowable costs" for Fiscal Year 2019-2020 and for Fiscal Year 2020-2021 were resolved between the parties or were not contested in the evidence or positions of the parties. Consequently, the Commission will discuss the issues in general to reflect our reliance upon the evidentiary record for the findings and conclusions in this order.

### **A. "Allowable Costs" for Fiscal Year 2019-2020**

In accordance with the provisions of the "Collaborative Review of Chem-Nuclear's

Operations and Efficiency Plan” (“OEP”), approved in Order No. 2004-349 for use in these “allowable cost” proceedings, Chem-Nuclear’s Original and Amended Applications separated costs into three (3) categories: fixed, variable and irregular. *See* Hearing Exhibit 2, Amended Exhibit A; Hearing Exhibit No. 1, ORS Examination Report, Exhibit 1. As recognized in Order No. 2004-349, the OEP is valid for use as a “baseline for establishing a method for identifying ‘allowable costs.’” Order No. 2004-349, p. 17.

1. Fixed Costs for Fiscal Year 2019-2020

Chem-Nuclear separated its fixed costs for Fiscal Year 2019-2020 into several general categories: labor, fringe and non-labor costs, corporate allocation of general and administrative expense, equipment leases and support, depreciation, and insurance, as well as those fixed costs for which the statutory operating margin was not applicable, such as legal support. The Company’s operating expense for that period resulted in total fixed costs of \$3,142,621, which Chem-Nuclear actually incurred. Hearing Exhibit No. 2, Amended Application ¶10 and Amended Exhibit A, p. 1. The total fixed costs incurred for 2019-2020 were \$2,475 less than the level of fixed costs anticipated in Order No. 2020-441. Hearing Exhibit No. 2, Amended Application ¶10 and Amended Exhibit A, p. 1; Hearing Exhibit No. 1, ORS Examination Report, Exhibit 1, p. 1. The record supports the identification of \$3,142,621 as fixed “allowable costs” for Fiscal Year 2019-2020.

2. Variable Material Costs for Vaults for Fiscal Year 2019-2020

The actual costs for vaults are predicated on a number of factors, including the size and shape of waste packages and the number and size of vaults required for disposal. For Fiscal Year 2019-2020, Chem-Nuclear’s actual cost for disposal vaults was \$478,625.<sup>12</sup>

Hearing Exhibit No. 2, Amended Application ¶12, Amended Exhibit A, p. 3. This amount is \$33,630.43 more than the \$444,994.69 calculated vault cost using the rates established in Order No. 2020-441. Therefore, the Company proposes an adjustment of \$33,630.43 in this category of costs.

3. Variable Labor Costs and Non-Labor Costs for Fiscal Year 2019-2020

Order No. 2020-441 identified the following categories of rates for projecting variable labor and non-labor costs: vault purchase and inspection (per vault), ABC waste disposal (per shipment), slit trench waste operations (per slit trench offload), customer assistance (per shipment), and maintenance of trench records (per container). See Hearing Exhibit No. 2, Amended Exhibit A, p. 2. The Company incurred actual variable labor and non-labor costs of \$146,406.40 in Fiscal Year 2019-2020. This amount is \$53.02 more than the amount that was anticipated based on rates provided in Commission Order 2020-441. Therefore, the Company proposes an adjustment of \$53.02 in this category of costs.

4. Irregular Costs for Fiscal Year 2019-2020

Irregular costs include costs for projects that are nonrecurring annually or varying costs for projects which continue for more than a year. This category includes, but is not limited to, costs associated with trench design, site engineering, site maintenance, and license renewal and appeal costs. See Hearing Exhibit No. 2, Amended Exhibit A, p. 4. The record contains descriptions of each project and the actual costs that Chem-Nuclear incurred for them in Fiscal Year 2019-2020. Hearing Exhibit No. 2, Amended Exhibit A, p. 4, Amended Exhibit B. The evidence in the record establishes that Chem-Nuclear incurred actual irregular costs for Fiscal Year 2019-2020 of \$1,016,237. Hearing Exhibit



No. 2, Amended Exhibit A, p. 4; Hearing Exhibit No. 1, Exhibit 1, p. 2. This amount is \$239,794 less than the \$1,256,031 in irregular costs identified in Commission Order No. 2020-441. The record supports treatment of actual irregular costs for fiscal year 2019-2020 of \$1,016,237 as “allowable.”

B. Proposed “Allowable Costs” for Fiscal Year 2020-2021

Chem-Nuclear’s Amended Application and the evidence in the record presented “allowable costs” to be identified for Fiscal Year 2020-2021, separated into the three (3) cost categories that were described in the Collaborative Review of the OEP and adopted in Order No. 2004-349.

1. Allowable Fixed Costs for Fiscal Year 2020-2021

Chem-Nuclear proposed fixed costs of \$3,078,522 to be identified as “allowable costs” for Fiscal Year 2020-2021. That amount was based on costs incurred in the first half of Fiscal Year 2020-2021 and activities anticipated for the second half of the fiscal year. Hearing Exhibit No. 2, Amended Exhibit C; Hearing Exhibit No. 1, Exhibit 2; Direct Testimony of witness Smith, p. 11.

2. Allowable Irregular Costs for Fiscal Year 2020-2021

Chem-Nuclear’s Amended Application includes general categories of projects with estimated total costs of \$577,277, which it categorized as irregular costs for Fiscal Year 2020-2021. These irregular costs, identified in Amended Exhibit C in Hearing Exhibit No. 2, are based on costs incurred in the first half of Fiscal Year 2020-2021 and activities anticipated for the second half of the fiscal year. Hearing Exhibit No. 2, Amended Exhibit C; Hearing Exhibit No. 1, Exhibit 2; Direct Testimony of witness Smith, p. 11.

3. Variable Material Cost (Vaults) Rates for Fiscal Year  
2020-2021

For Fiscal Year 2020-2021, Chem-Nuclear proposed variable material cost rates for each category of waste based upon actual experience during Fiscal Year 2019-2020, inflated by 2.5%. Direct Testimony of witness Smith, pp. 11-12; see also Hearing Exhibit 2, Amended Exhibit C.

4. Variable Labor and Non-Labor Rates for Fiscal Year  
2020-2021

For Fiscal Year 2020-2021, Chem-Nuclear proposed rates for variable labor and non-labor costs. Hearing Exhibit No. 2, Amended Exhibit C. Those rates pertained to five (5) categories: vault purchase and inspection (per vault); ABC waste disposal (per shipment); slit trench shipment (per offload); customer assistance (per shipment); and trench records (per container). The rates for vault purchase and inspection, ABC waste disposal, slit trench operations, customer assistance, and trench records were based on actual experience during Fiscal Year 2019-2020, inflated by 2.5%. Direct Testimony of witness Smith, p. 11.

### **III. FINDINGS AND CONCLUSIONS**

1. The Public Service Commission of South Carolina is authorized and directed by S.C. Code Ann. § 48-46-40(B), et seq. to identify allowable costs for Chem-Nuclear's operation of a regional low-level radioactive waste disposal facility in South Carolina. The facility is located in Barnwell, South Carolina.

2. Chem-Nuclear has operated the disposal site continuously since 1971 without interruptions. Undisputed amounts in Chem-Nuclear's accounts that will herein be identified and approved by this Commission as "allowable costs" for the Fiscal Year ending

June 30, 2020 (Fiscal Year 2019-2020) are included in Appendix A, which is attached to this Order. These “allowable costs” total \$4,783,889.

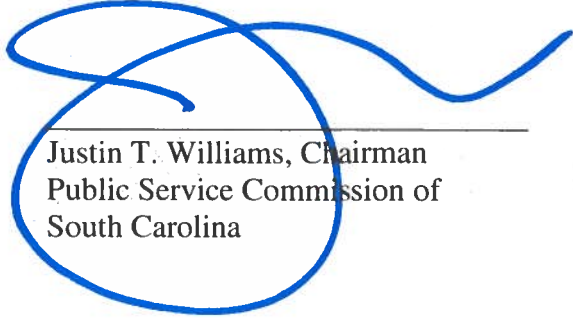
3. Further, we approve and identify as “allowable costs” for the Fiscal Year ending June 30, 2021 (Fiscal Year 2020-2021) the amounts of \$3,078,522 in fixed costs and \$577,277 in irregular costs, as reflected in Appendix B, which is attached to this Order as Order Ex. These fixed and irregular costs total \$3,655,799.

4. We further approve the variable cost rates for the Fiscal Year ending June 30, 2021 (Fiscal Year 2020-2021) as those costs and rates are depicted in Appendix B, which is attached to this Order. The actual expenses in the variable cost category will be dependent on the actual volumes and classes of waste received. The rates in Appendix B are appropriately documented and supported by evidence in the record of this proceeding.

5. Chem-Nuclear shall continue to submit monthly reports of variable cost data to the Commission as required by Commission Order No. 2001-499.

6. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:



Justin T. Williams, Chairman  
Public Service Commission of  
South Carolina

APPENDIX A – Order No. 2021-412  
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Chem-Nuclear Systems, LLC  
Allowable Costs  
Fiscal Year Ending June 30, 2020

<u>Description</u>	<u>Allowable Cost</u>
<b>Fixed Costs</b>	
Labor, Fringe and Non-Labor	\$1,987,848
Depreciation	\$129,932
Insurance	\$282,662
Equipment Leases and Support	\$93,074
Corporate Allocations (G&A)	\$649,105
Legal Support (License Appeal)*	\$0
<b>Total Fixed Costs</b>	<b>\$3,142,621</b>
<b>Variable Costs</b>	
Variable Labor and Non-Labor**	\$146,406
Vault Costs	\$478,625
<b>Total Variable Costs</b>	<b>\$625,031</b>
<b>Irregular Costs</b>	
<b>Total Irregular Costs</b>	<b>\$1,016,237</b>
<b>Total Allowable Costs</b>	<b>\$4,783,889</b>

\* Not subject to statutory operating margin.

\*\*Categories of costs include: Vault Purchase and Inspection, ABC Waste Disposal, Slit Trench Operations, Customer Assistance and Trench Records.

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Chem-Nuclear Systems, LLC  
Allowable Costs  
Fiscal Year 2020-2021 (Ending June 30, 2021)

<u>Description</u>	<u>Allowable Cost</u>
<b>Fixed Costs</b>	
Labor, Fringe and Non-Labor	\$2,007,435
Depreciation	\$124,693
Insurance	\$289,729
Equipment Leases and Support	\$80,665
Corporate Allocations (G&A, IT)	\$576,000
Legal Support (License Appeal)*	\$0
<b>Total Fixed Costs</b>	<b>\$3,078,522</b>
<b>Irregular Costs</b>	
Trench Characterization and Construction	\$57,624
Equipment Repairs	\$19,153
Large Component Disposal	\$500,000
Storm Damage Repairs and Clean-up	\$51
Trench Records Software	\$308
Site Engineering and Drawing Updates	\$141
<b>Total Irregular Costs</b>	<b>\$577,277</b>
<b>Total Fixed and Irregular Costs</b>	<b>\$3,655,799</b>
<b>Variable Costs</b>	
<b><u>Variable Labor and Non-Labor Rates</u></b>	
Vault Purchase and Inspection (per vault)	\$184.76
ABC Waste Disposal (per shipment)	\$1,566.33
Slit Trench Operations (per offload)	\$44,844.35
Customer Assistance (per shipment)	\$136.80
Trench Records (per container)	\$337.37
<b><u>Variable Material Cost (Vault Costs)</u></b>	
Class A Waste (per cubic foot)	\$43.82
Class B Waste (per cubic foot)	\$54.94
Class C Waste (per cubic foot)	\$55.84
Slit Trench Waste (per cubic foot)	\$188.57